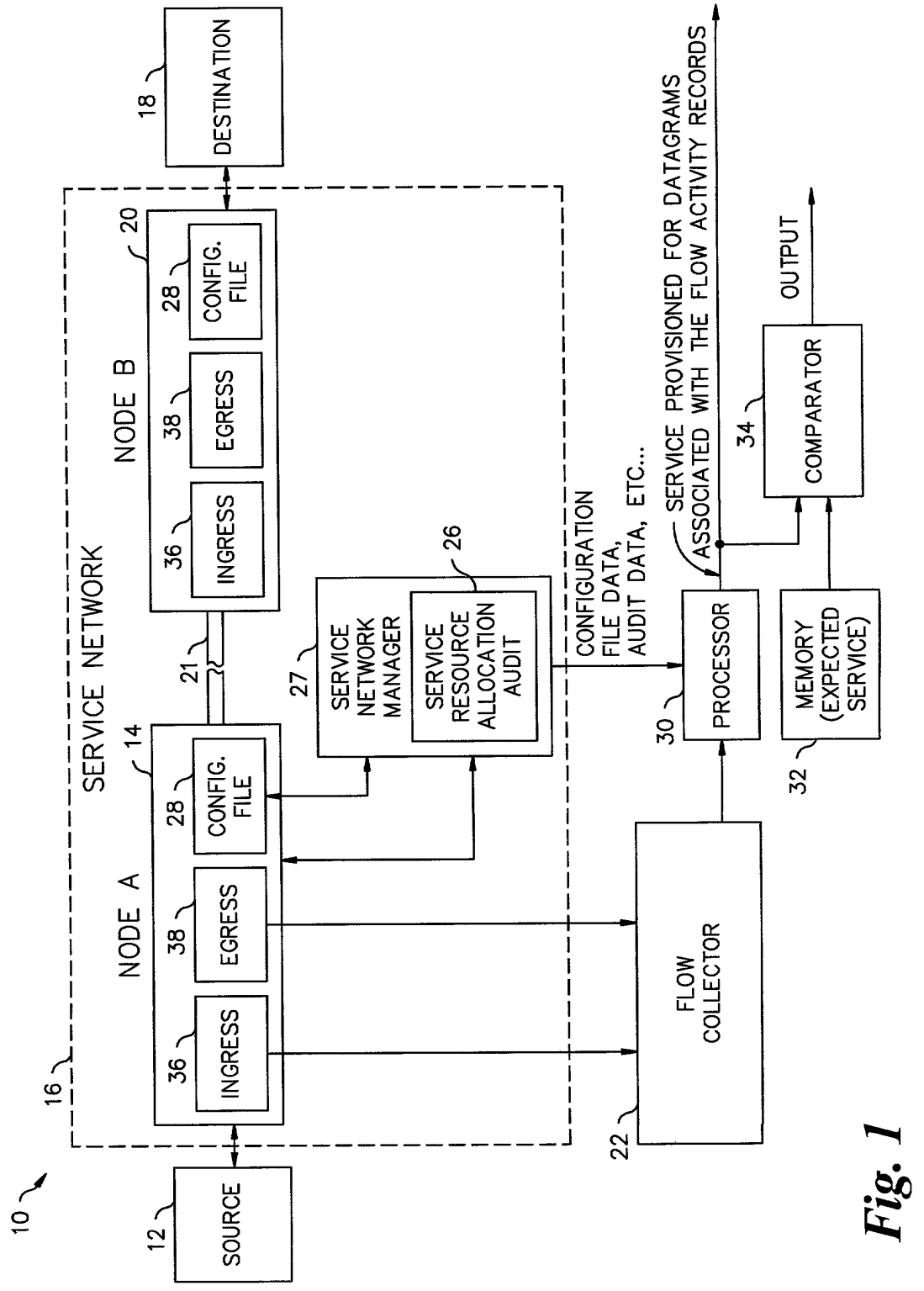
10
SOURCE
12
16
SERVICE NETWORK
NODE A
14
INGRESS
36
EGRESS
38
CONFIG. FILE
28
NODE B
20
INGRESS
36
EGRESS
38
CONFIG. FILE
28
21
DESTINATION
18
SERVICE NETWORK MANAGER
27
SERVICE RESOURCE ALLOCATION AUDIT
26
CONFIGURATION FILE DATA, AUDIT DATA, ETC...
SERVICE PROVISIONED FOR DATAGRAMS ASSOCIATED WITH THE FLOW ACTIVITY RECORDS
FLOW COLLECTOR
22
PROCESSOR
30
MEMORY (EXPECTED SERVICE)
32
COMPARATOR
34
OUTPUT

Fig. 1

24

TIME STAMP DATA

FLOW ACTIVITY RECORDS

START TIME	END TIME OR DURATION	FLOW DESCRIPTOR	SERVICE IDENTIFIER	SERVICE PROVISIONED
t_1		fd_1	SI_{1i} , SI_{1e}	SP_{1i} , SP_{1e}
t_2		fd_2	SI_{2i} , SI_{2e}	SP_{2i} , SP_{2e}
⋮		⋮	⋮	⋮
t_n		fd_n	SI_{ni} , SI_{ne}	SP_{ni} , SP_{ne}

Fig. 2

SERVICE RESOURCE ALLOCATION AUDIT (DYNAMIC SERVICE NETWORK)

TIME STAMP DATA

START TIME	END TIME OR DURATION	SERVICE IDENTIFIER	SERVICE PROVISIONED
t_1		SI_1 SI_2 ⋮ SI_n	SP_1 SP_2 ⋮ SP_n
t_2		SI_1 SI_2 ⋮ SI_n	SP_1 SP_2 ⋮ SP_n
t_3		SI_1 SI_2 ⋮ SI_n	SP_1 SP_2 ⋮ SP_n

26

Fig. 3
(Prior Art)

CONFIGURATION FILE
(NON–DYNAMIC SERVICE NETWORK)

SERVICE IDENTIFIER	SERVICE PROVISIONED
i_1	SP_1
i_2	SP_2
⋮	⋮
i_n	SP_n

28

Fig. 4 (Prior Art)

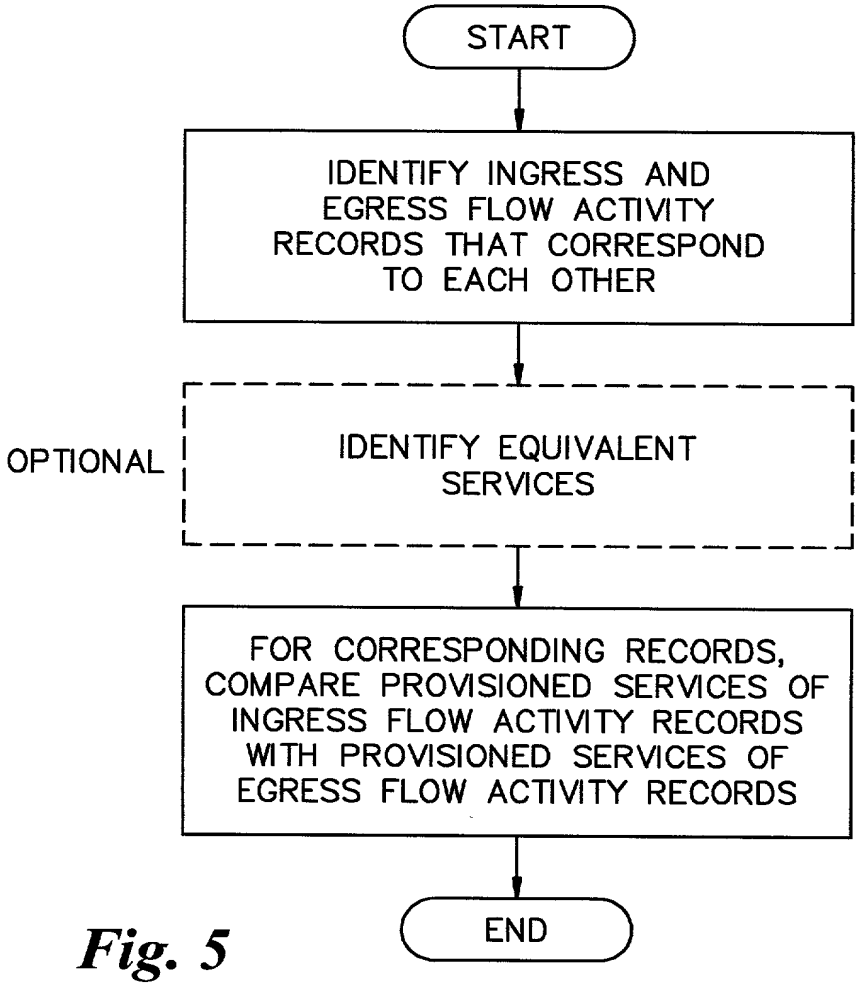

Fig. 5

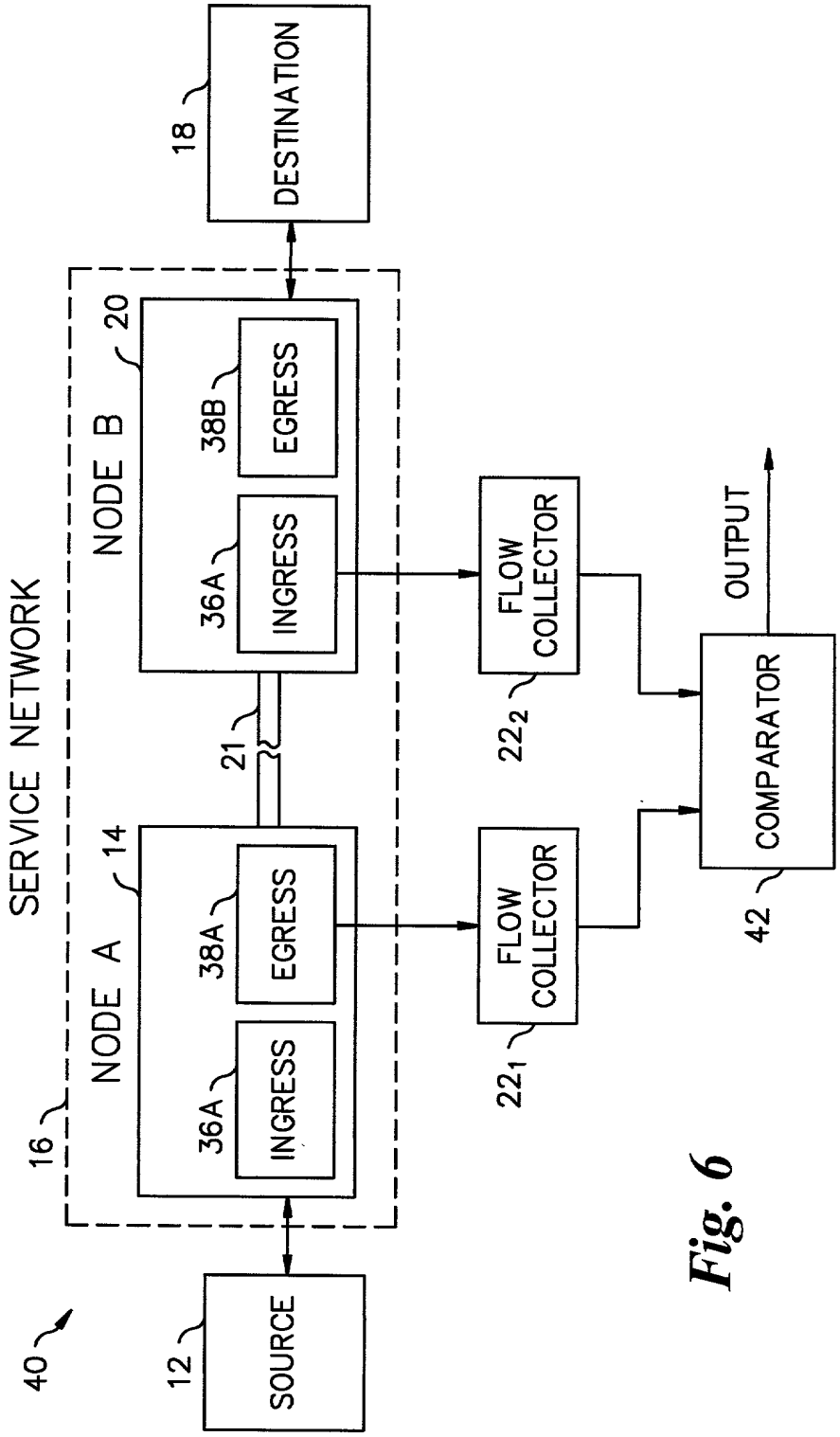
40
12
SOURCE
16
SERVICE NETWORK
14
NODE A
36A
INGRESS
38A
EGRESS
21
20
NODE B
36A
INGRESS
38B
EGRESS
18
DESTINATION
22_1
FLOW COLLECTOR
22_2
FLOW COLLECTOR
42
COMPARATOR
OUTPUT

Fig. 6

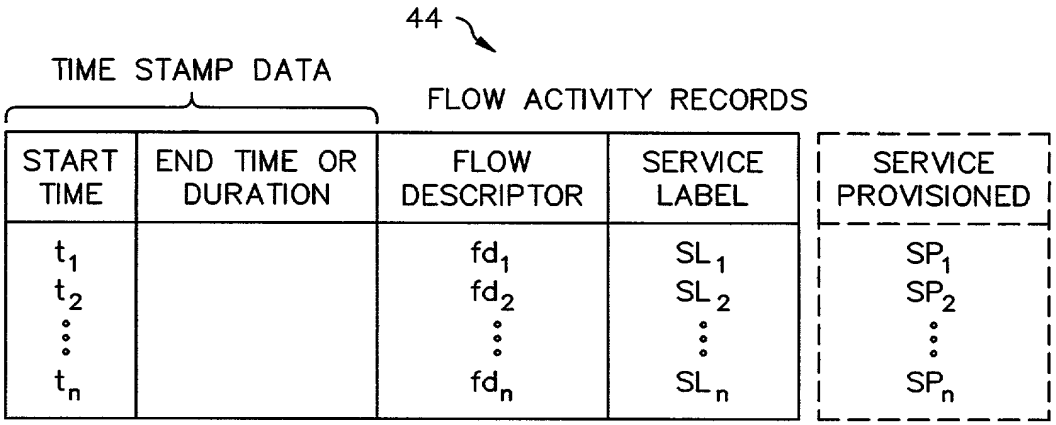

Fig. 7

SERVICE LABEL FILE OF LOOKUP FACILITY

SERVICE LABEL	SERVICE PROVISIONED
SL_1	SP_1
SL_2	SP_2
⋮	⋮
SL_n	SP_n

Fig. 8

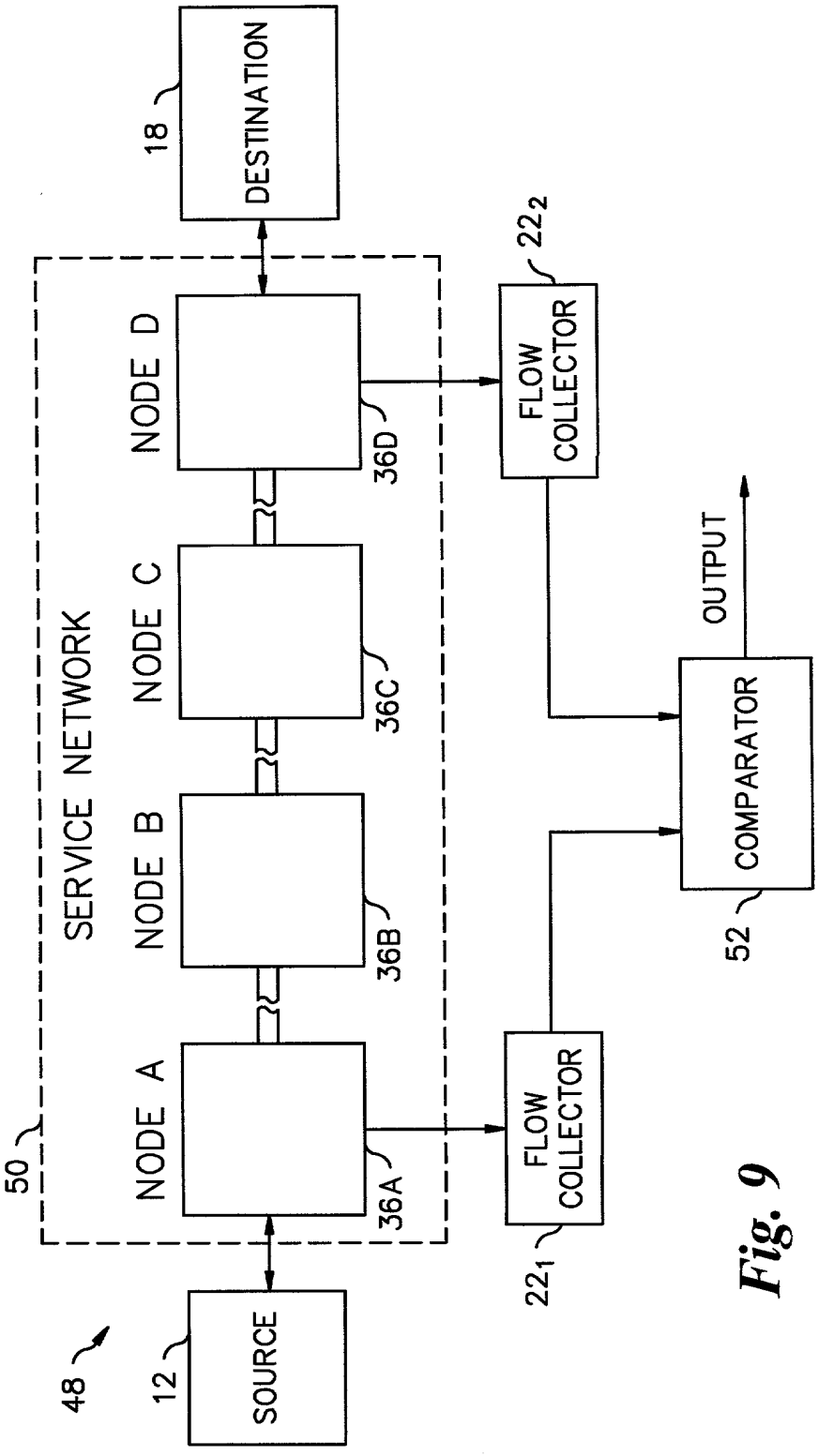
18
DESTINATION
22_2
FLOW COLLECTOR
NODE D
36D
NODE C
36C
NODE B
36B
NODE A
36A
SERVICE NETWORK
50
OUTPUT
COMPARATOR
52
FLOW COLLECTOR
22_1
48
12
SOURCE

Fig. 9

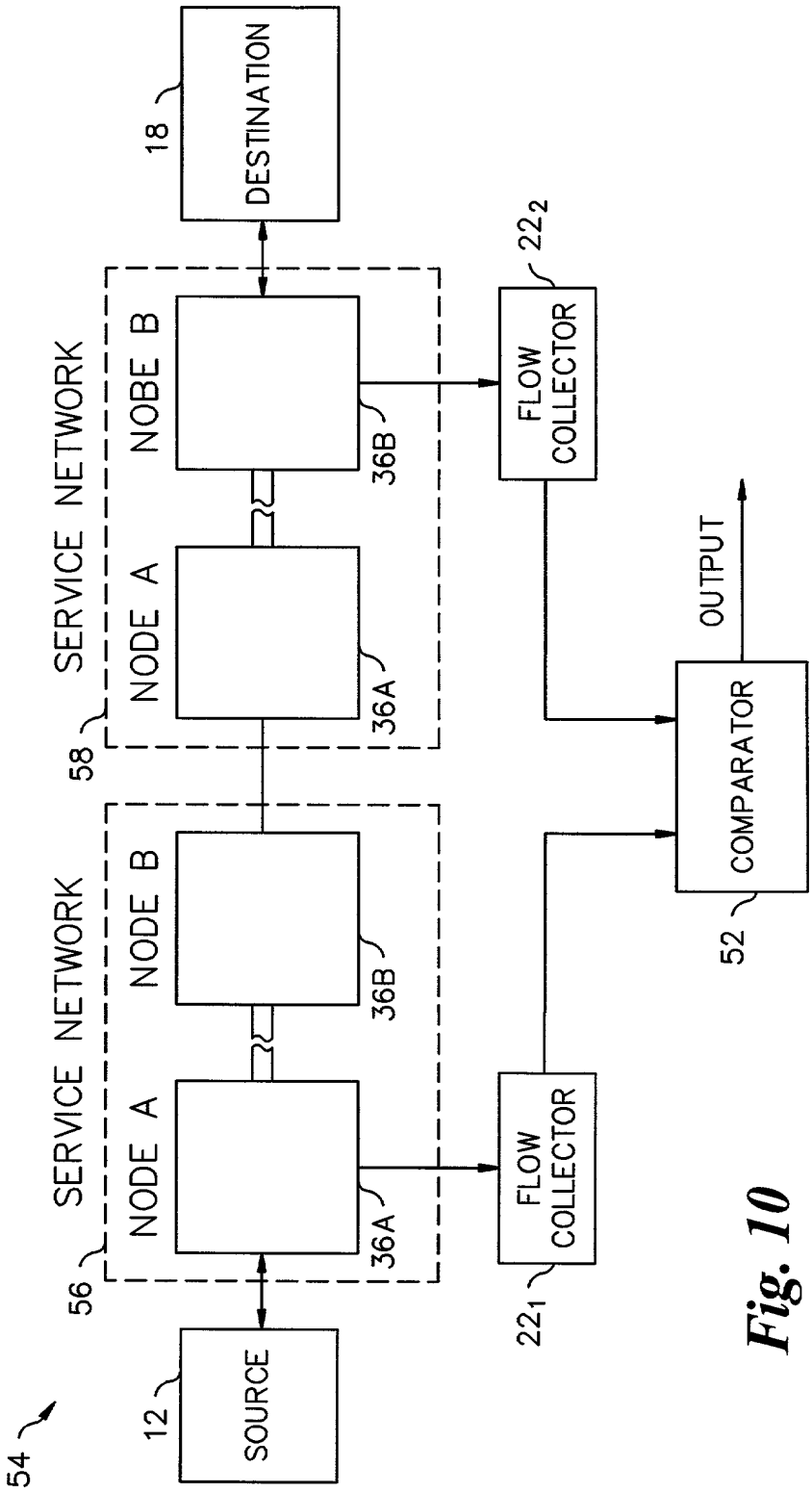
54
12
SOURCE
56
SERVICE NETWORK
NODE A
36A
NODE B
36B
58
SERVICE NETWORK
NODE A
36A
NODE B
36B
18
DESTINATION
22_1
FLOW COLLECTOR
22_2
FLOW COLLECTOR
52
COMPARATOR
OUTPUT

Fig. 10

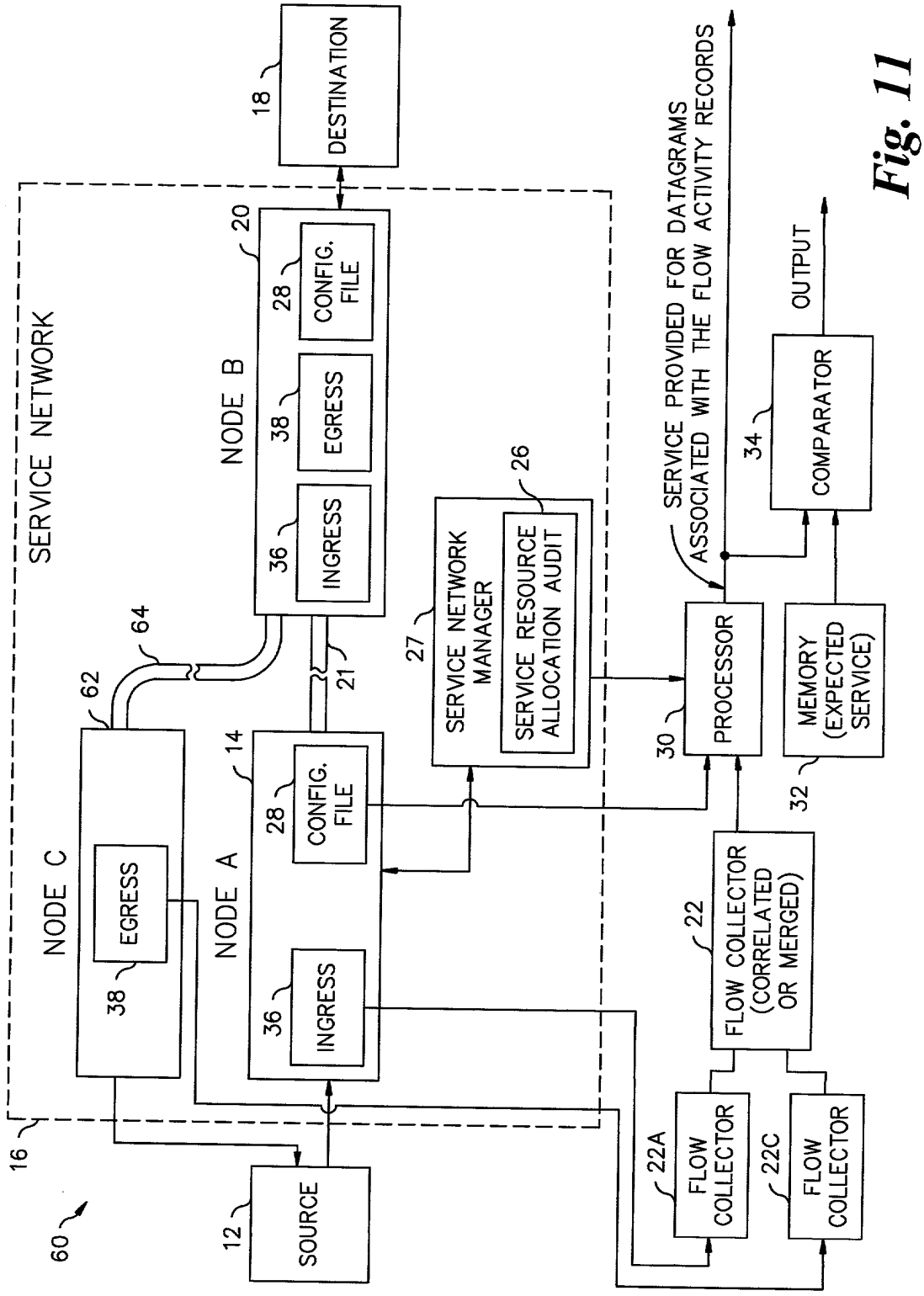
60
SOURCE
12
16
SERVICE NETWORK
NODE C
EGRESS
38
62
64
NODE A
CONFIG. FILE
28
INGRESS
36
14
21
NODE B
20
CONFIG. FILE
28
EGRESS
38
INGRESS
36
DESTINATION
18
SERVICE NETWORK MANAGER
27
SERVICE RESOURCE ALLOCATION AUDIT
26
PROCESSOR
30
MEMORY (EXPECTED SERVICE)
32
SERVICE PROVIDED FOR DATAGRAMS ASSOCIATED WITH THE FLOW ACTIVITY RECORDS
COMPARATOR
34
OUTPUT
FLOW COLLECTOR (CORRELATED OR MERGED)
22
FLOW COLLECTOR
22A
FLOW COLLECTOR
22C

Fig. 11